Subject: Re: regarding scope of variables
Posted by David Fanning on Sat, 26 Nov 2005 04:42:33 GMT
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## IDLmastertobe writes:

- > Hi, I have an array of data and I am trying to keep a copy of it so that i
- > can restore the origianl data after certain operations. however I found
- > everytime it reiterates the function, the variable that keeps the copy
- > would go out of scope and my copy is gone. following is part of my code:

>

- > if(size(ydata, /n\_dimensions) eq 3) then begin
- > if(!firsty eq 1) then begin
- > yarr = ydata
- > !firsty=0
- > endif
- > ydata = smooth(yarr, [1, !smo, !smo])
- > oyimage->SetProperty, data = ydata
- > endif

>

- > however, the second time when this code is called, the yarr variable
- > becomes undefined since it goes out of scope. What it copied in the first
- > time is gone. Since I have no information on the size of the array i'm
- > copying, i cannot preset an array as system variable to run. Does anyone
- > have any idea?

I have a hunch "variable scope" is not your real problem here. I already see two more system variables in these few lines of code than I've ever used in an IDL procedure. :-)

Is the real problem that you can't figure out how to pass around data in a widget program? Have you thought about using pointers?

Cheers,

David

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David Fanning, Ph.D. Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: regarding scope of variables
Posted by IDLmastertobe on Sat, 26 Nov 2005 09:19:25 GMT
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Thanks Dr. Fanning. I never used pointers IDL. It looks like the variable

"yarr" only exists in this one procedure and as soon as the procedure is called again, "yarr" is no longer defined if !firsty is not 1. Is there a way to declear a global dynamic variable that can preserve value when the procedure is called multiple times and the size of the variable can vary depending on the array we are copying? such as Vector function in C++ and JAVA. Thank you.

Subject: Re: regarding scope of variables
Posted by David Fanning on Sat, 26 Nov 2005 14:51:34 GMT
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## IDLmastertobe writes:

- > Thanks Dr.Fanning. I never used pointers IDL. It looks like the variable
- > "yarr" only exists in this one procedure and as soon as the procedure is
- > called again, "yarr" is no longer defined if !firsty is not 1. Is there a
- > way to declear a global dynamic variable that can preserve value when the
- > procedure is called multiple times and the size of the variable can vary
- > depending on the array we are copying? such as Vector function in C++ and
- > JAVA.

I think you are looking for a pointer. :-)

You might like to read the pointer tutorial:

http://www.dfanning.com/misc\_tips/pointers.html

Cheers,

David

--

David Fanning, Ph.D. Fanning Software Consulting, Inc.

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Subject: Re: regarding scope of variables Posted by R.Bauer on Sun, 27 Nov 2005 09:09:28 GMT

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## IDLmastertobe wrote:

- > Thanks Dr.Fanning. I never used pointers IDL. It looks like the variable
- > "yarr" only exists in this one procedure and as soon as the procedure is
- > called again, "yarr" is no longer defined if !firsty is not 1. Is there a

- > way to declear a global dynamic variable that can preserve value when the
- > procedure is called multiple times and the size of the variable can vary
- > depending on the array we are copying? such as Vector function in C++ and
- > JAVA. Thank you.

Follow Davids advice

cheers Reimar